

## CLAIMS:

1. A method of referencing a first number for data (29) to be stored, where data is shared among a producer (10) and a consumer (11), said method comprising the steps of:
  - computing (100) said first number (24, offset) equalling  $p$  (25) minus Vaprod (26), wherein  $p$  is in the virtual address space of the producer, and Vaprod is in the virtual address space of the producer (20); and
  - storing (200) said first number as the address for said data in a scatter gather list.
2. A method of referencing a first number for data to be stored according to claim 1 further comprising the step of:
  - storing (300) data at location  $p$ .
3. A method of referencing a first address for data to be retrieved, where data is shared among a producer and a consumer, said method comprising the steps of:
  - retrieving (400) a second number from a scatter gather list, wherein said second number (24, offset) equals  $p$  (25) minus Vaprod (26), wherein  $p$  is in the virtual address space of the producer, and Vaprod is in the virtual address space of the producer; and
  - computing (500) said first address (27,  $q$ ) as a VAcons (28) plus said second number, wherein said VAcons is the consumer address for the scatter gather list in the virtual address space of said consumer (21), and where said first address is in the virtual address space of said consumer.
4. A method of referencing a first address for data to be retrieved according to claim 3 further comprising the step of:
  - retrieving (600) data, wherein said retrieved data is pointed to by said first address.
5. A computer system for performing the method according to claim 1 or 2.
6. A computer system for performing the method according to claim 3 or 4.

7. A computer program product comprising program code means stored on a computer readable medium for performing the method of claims 1 or 2 when the computer program is run on a computer.
- 5 8. A computer program product comprising program code means stored on a computer readable medium for performing the method of claims 3 or 4 when the computer program is run on a computer.
9. Use of the method according to claim 1 or 2 for data storage in a  
10 multiprocessor system.
10. Use of the method according to claim 3 or 4 for data retrieval in a multiprocessor system.